

What is claimed is:

1. An interactive enabling system for managing interactive program and commercial content, the system comprising:
- an interactive enabling device coupled for receiving a broadcast stream, the broadcast stream containing interactive program triggers and interactive commercial triggers for retrieving the interactive program and commercial content; and
- at least one interactive content server coupled for communicating with an interactive control application in the interactive enabling device;
- wherein the interactive enabling device executes the interactive control application to manage the retrieval of the interactive program and commercial content from the at least one interactive content server in response to the interactive program and commercial triggers.
2. The system as recited in claim 1, the interactive control application including a gatekeeper function for selectively retrieving interactive program and commercial content in response to recognized interactive program and commercial triggers.
3. The system as recited in claim 1, wherein the interactive enabling device retrieves the interactive program and commercial content from the at least one interactive content server through a communication link or assembled from information in the broadcast stream.
4. The system as recited in claim 2, wherein the interactive enabling device is configured for receiving and responding to event and time-driven triggers embedded in the broadcast stream to ensure that the interactive

program and commercial content does not extend beyond specified time limits, overlap, or otherwise interfere with each other.

5 5. The system as recited in claim 2, wherein the gatekeeper is configured to recognize the interactive program and commercial triggers based on agreements between broadcasters and program or commercial sponsors.

6. The system as recited in claim 2, wherein the gatekeeper is configured to recognize the interactive program and commercial triggers based on parameters embedded within the interactive program and commercial triggers.

10 7. The system as recited in claim 2, wherein the gatekeeper is configured to recognize the interactive program and commercial triggers based on parameters maintained within the interactive enabling device.

15 8. The system as recited in claim 1, wherein the interactive enabling device includes a randomizer for randomly time-skewing the retrieval of the interactive program and commercial content in response to the interactive program and commercial triggers.

9. An interactive enabling system for managing interactive program and commercial content, the system comprising:

20 an interactive enabling device coupled for receiving a broadcast stream generated by a broadcast sponsor and for responding to interactive program and commercial pre-triggers inserted into the broadcast stream for retrieving the interactive program and commercial content in advance of when the content is needed; and

25 at least one interactive content server coupled through a communication link for communicating with an interactive control application in the interactive enabling device;

wherein the interactive enabling device executes the interactive control application to manage the retrieval of the interactive program and commercial content in response to the interactive program and commercial pre-triggers.

5 10. The system as recited in claim 9, wherein the interactive enabling device is configured for receiving interactive program and commercial pre-triggers that were inserted into the broadcast stream by the broadcast sponsor at a specific time in advance of when the interactive program and commercial content is needed, based on estimates for communication link speed.

10 11. The system as recited in claim 9, the interactive enabling device including a list of approved pre-triggers;
 wherein the interactive control application enables the retrieval of the interactive program and commercial content only if codes embedded in the interactive program and commercial pre-triggers match the codes in the list of
15 approved pre-triggers.

 12. The system as recited in claim 9, wherein the interactive enabling device includes a randomizer for randomly time-skewing the retrieval of the interactive program and commercial content in response to the interactive program and commercial pre-triggers.

20 13. An interactive enabling system for managing a viewer's interactive viewing experience, the system comprising:

 one or more interactive enabling devices coupled for receiving a broadcast stream generated by a broadcast sponsor, the broadcast stream including time or event-based state-saving triggers for saving a state of the
25 viewer's interactive viewing experience; and

at least one interactive content server coupled through a communication link for receiving the viewer's interactive state from the interactive enabling device and storing the viewer's interactive state;

wherein upon receipt of each state-saving trigger, the interactive enabling device being used by the viewer communicates the viewer's interactive state to the at least one interactive content server; and

wherein upon receipt of a request from the interactive enabling device to restore the viewer's interactive state, the at least one interactive content server is programmed for communicating the viewer's interactive state back to the interactive enabling device.

14. The system as recited in claim 13, wherein upon receipt of a request from any one of the interactive enabling devices to restore the viewer's interactive state, the at least one interactive content server is programmed for communicating the viewer's interactive state back to the one interactive enabling device.

15. The system as recited in claim 13, wherein the interactive enabling device includes a randomizer for randomly time-skewing the communication of the viewer's interactive state to the at least one interactive content server in response to the receipt of the state-saving triggers.

16. An interactive enabling system for measuring a viewer's viewership and viewing patterns, the system comprising:

an interactive enabling device coupled for receiving a broadcast stream generated by a broadcast sponsor, the broadcast stream including time or event-based viewership triggers for monitoring viewership patterns; and

at least one interactive content server coupled through a communication link for receiving and storing a viewing indicator received from the interactive enabling device in response to the time or event-based viewership

triggers, the viewing indicator providing an indication of whether the viewer is watching the broadcast stream interactively;

wherein upon receipt of each viewership trigger, the interactive enabling device communicates the viewing indicator to the at least one interactive content server; and

wherein the at least one interactive content server is programmed for evaluating viewership and viewing patterns and adjusting programming or advertisements based on the received viewership triggers.

17. The system as recited in claim 16, the interactive enabling device including an interactive control application for managing the retrieval of interactive program and commercial content in response to interactive program and commercial triggers embedded in the broadcast stream;

wherein the at least one interactive content server communicates control information to the interactive enabling device based on the viewership and viewing patterns for selectively retrieving interactive program and commercial content in response to the interactive program and commercial triggers.

18. The system as recited in claim 16, the interactive enabling device including an interactive control application for managing the retrieval of interactive program and commercial content in response to interactive program and commercial triggers embedded in the broadcast stream;

wherein the at least one interactive content server selectively communicates interactive program and commercial content to the interactive enabling device in response to requests for the interactive program and commercial content from the interactive enabling device based on the viewership and viewing patterns.

19. A method for managing interactive program and commercial content, comprising:

receiving a broadcast stream, the broadcast stream containing interactive program triggers and interactive commercial triggers for retrieving the interactive program and commercial content from at least one interactive content server; and

managing the retrieval of the interactive program and commercial content from the at least one interactive content server in response to the interactive program and commercial triggers.

20. The method as recited in claim 19, further including selectively retrieving interactive program and commercial content in response to recognized interactive program and commercial triggers.

21. The method as recited in claim 19, further including retrieving the interactive program and commercial content from the at least one interactive content server through a communication link or assembling the interactive program and commercial content from information in the broadcast stream.

22. The method as recited in claim 20, further including receiving and responding to event and time-driven triggers embedded in the broadcast stream to ensure that the interactive program and commercial content do not extend beyond specified time limits, overlap, or otherwise interfere with each other.

23. The method as recited in claim 20, further including recognizing the interactive program and commercial triggers based on agreements between broadcasters and program or commercial sponsors.

24. The method as recited in claim 20, further including recognizing the interactive program and commercial triggers based on parameters embedded within the interactive program and commercial triggers.

5 25. The method as recited in claim 20, further including recognizing the interactive program and commercial triggers based on parameters maintained within the interactive enabling device.

26. The method as recited in claim 19, further including randomly time-skewing the retrieval of the interactive program and commercial content in response to the interactive program and commercial triggers.

10 27. A method for managing interactive program and commercial content, comprising:

receiving a broadcast stream generated by a broadcast sponsor and responding to interactive program and commercial pre-triggers inserted into the broadcast stream for retrieving the interactive program and commercial content in advance of when the content is needed; and

15 managing the retrieval of the interactive program and commercial content in response to the interactive program and commercial pre-triggers.

20 28. The system as recited in claim 27, further including:
maintaining a list of approved pre-triggers; and
enabling the retrieval of the interactive program and commercial content only if codes embedded in the interactive program and commercial pre-triggers match the list of approved pre-triggers.

29. The method as recited in claim 27, further including randomly time-skewing the retrieval of the interactive program and commercial content in response to the interactive program and commercial pre-triggers.

30. A method for managing a viewer's interactive viewing experience, comprising:

receiving a broadcast stream generated by a broadcast sponsor, the broadcast stream including time or event-based state-saving triggers for saving a state of the viewer's interactive viewing experience;

storing the state of the viewer's interactive viewing experience in response to the time or event-based state-saving triggers; and

restoring the state of the viewer's interactive viewing experience upon receipt of a request to restore the state of the viewer's interactive viewing experience.

31. The method as recited in claim 30, further including randomly time-skewing the storing of the state of the viewer's interactive viewing experience in response to the receipt of the state-saving triggers.

32. A method for measuring a viewer's viewership and viewing patterns, comprising:

receiving a broadcast stream generated by a broadcast sponsor, the broadcast stream including time or event-based viewership triggers for monitoring viewership patterns;

storing a viewership indicator generated in response to the time or event-based viewership triggers, the viewership indicator providing an indication of whether the viewer is watching the broadcast stream interactively; and

evaluating viewership and viewing patterns and adjusting programming or advertisements based on the received viewership indicators.

33. The method as recited in claim 32, further including:

managing the retrieval of interactive program and commercial content in response to interactive program and commercial triggers embedded in the broadcast stream; and

utilizing control information derived from the viewership and viewing patterns for selectively retrieving the interactive program and commercial content in response to the interactive program and commercial triggers.